

REMARKS

The Office Action mailed October 17, 2003, has been carefully reviewed and the following remarks have been made in consequence thereof.

Claims 1-3, 5-9, 11-16, and 18 are now pending in this application. Claims 1-3, 5-9, 11-16, and 18 stand rejected. Claims 4, 10, and 17 have been canceled.

The objection to the drawings under 37 C.F.R. 1.83(a) is respectfully traversed. Applicant respectfully submits that every feature of the invention as recited in the claims is clearly illustrated in the Figures. More specifically, and with respect to the structure of Claim 1 for example, Figure 2 illustrates fuel system interface 36 including selector valve 67 receiving an electrically-originated overspeed signal from an independent speed sensing system 40. Figure 4 illustrates the same fuel system interface selector valve 67 receiving a mechanically-originated overspeed signal from an independent speed sensing system 102. Accordingly, as is recited in Claim 1, Applicant submits that a fuel system interface including a shutoff shuttle valve is illustrated receiving electrically-originated overspeed signals (illustrated in Figure 2) and mechanically-originated overspeed signals (illustrated in Figure 4). For the reasons set forth above, Applicant respectfully requests the objection to the drawings be withdrawn.

The objection to the specification is respectfully traversed. The amendments to page 6, paragraph 2 have been canceled. With respect to the assertion that there is no basis in the original specification for the material added to the specification at page 2, paragraph 2, Applicant respectfully disagrees and submits that the application as filed, does in fact support the above-referenced specification amendments. For example, the priority logic table illustrated in Figure 3 illustrates a plurality of conditions under which engine fuel flow may be initiated based on the various combinations of signals shown in Figure 3. Specifically, the priority logic table illustrated in Figure 3 illustrates a four different operating conditions in which an overspeed signal is sensed. An artisan of ordinary skill in the art, after reading the specification in light of the Figures, would recognize that within the priority logic table, various operating combinations are shown, four of which include a signal indicative of an overspeed condition. As such,

Applicant respectfully submits that the amendments to the specification are supported by the specification as originally filed.

Moreover, Applicant respectfully disagrees with the assertion within the Office Action that the specification may not be amended to conform with the Claims as originally filed, without introducing new matter. Rather, Applicant respectfully submits that this assertion appears to contradict established case law and the MPEP. Specifically, as is well established, “the Claims as filed in the original specification are part of the disclosure...the applicant may amend the specification to include the claimed subject matter.” In re Benno, 226 USPQ 683 (Fed. Cir. 1985). MPEP 2163.06. Accordingly, the detailed description portion of the specification has been amended more clearly conform with the subject matter recited in the Claims as originally filed.

Accordingly, for at least the reasons set forth above, Applicant respectfully requests the objection to the specification be withdrawn.

The rejection of Claims 1-3, 5-9, 11-16, and 18 under 35 U.S.C. § 112, first paragraph, is respectfully traversed. Applicant respectfully submits that the specification as originally filed, does in fact describe a fuel system interface which receives electrically and mechanically originated over-speed signals. Claim 1, **as originally filed**, recited a method for assembling a gas turbine engine to prevent rotor over-speeding, wherein the method comprised “coupling a fuel system interface to the gas turbine engine such that the fuel system interface receives **electrically and mechanically originated over-speed signals** inputted from the engine...”

Claim 1 has been amended to recite “coupling a fuel system interface including a shutoff shuttle valve to the gas turbine engine such that a selector valve coupled within the fuel system interface is configured to receive electrically and mechanically originated over-speed signals inputted from the engine...”

As is well established, “the Claims as filed in the original specification are part of the disclosure...the applicant may amend the specification to include the claimed subject matter.” In re Benno, 226 USPQ 683 (Fed. Cir. 1985). MPEP 2163.06. Accordingly, the detailed description portion of the specification has been amended to more clearly describe that the fuel system interface illustrated in Figure 2 is the same fuel system interface illustrated in Figures 4 and 5, with the only difference being which independent speed sensing system coupled to the fuel system interface is actually illustrated in each specific Figure. In addition, with respect to the amendments to independent Claims 1, 6, and 13, the Figures, as filed, do support the recitation. Specifically, Figure 2, as originally filed, illustrates fuel system interface 36 including selector valve 67 receiving an electrically-originated overspeed signal from an independent speed sensing system 40, and Figure 4, as originally filed, illustrates the same fuel system interface selector valve 67 receiving a mechanically-originated overspeed signal from an independent speed sensing system 102.

Moreover, Applicant respectfully submits that one of ordinary skill in the art, after reading the specification in light of the Figures, would understand that the same fuel system interface selector valve is illustrated in Figures 2, 4, and 5, and as such, would then understand the fuel system interface and the selector valve operation as recited in the Claims, including the interaction between the selector valve and the electrical and mechanical originated overspeed signals.

Furthermore, Applicant respectfully disagrees with the assertion in the Office Action that one of ordinary skill in the art would not know “how the electrical and mechanical speed sensors would operate in conjunction with each other, and how they would interface with the fuel control system.” The Federal Circuit has opined in *Verve LLC v. Crane Cams, Inc.*, 65 USPQ 2d 1051, 1053-1054 (Fed. Cir. 2002), that “[p]atent documents are written for persons familiar with the relevant field; the patentee is not required to include in the specification information readily understood by practitioners, lest every patent be written as a comprehensive tutorial and treatise for the generalist, instead of a concise statement for persons in the field.” In the present case, Applicant respectfully submits that the specification is complete and that one skilled in the art

would understand how the fuel system interface receives electrically and mechanically originated over-speed signals. In addition, Applicant also submits that one of ordinary skill in the art would not need to understand how the electrical and mechanical speed sensors would operate in conjunction with each other, as the invention is not directed towards the interaction of the electrical and mechanical speed sensors, but rather is directed towards a fuel system interface that receives electrically and mechanically originated over-speed signals from the engine.

In addition, Applicant respectfully submits that the Section 112 rejections of Claims 1-3, 5-9, 11-16, and 18 is improper, as no express findings of fact, which support the lack of written description conclusion, have been presented to Applicant in accordance with MPEP 2163.04.

Moreover, Applicant respectfully disagrees with the assertion in the Office Action that the specification, for example, at page 6, line 15, only supports one overspeed signal. Rather, Applicant submits that one of ordinary skill in the art would recognize that the priority logic table illustrated in Figure 3 illustrates a plurality of conditions under which engine fuel flow may be initiated based on the various combinations of signals shown in Figure 3. Moreover, “resolution of any ambiguity may be aided by extrinsic evidence of usage and meaning of a term in the context of the invention” such that the determining factor regarding the meaning of a term, is “how the phrase would be understood by persons experienced in the field...upon reading the patent documents.” Specifically, Applicant respectfully submits that an artisan of ordinary skill in the art would recognize that within the priority logic table, various operating combinations are shown, many of which include a signal indicative of an overspeed condition, and that as such, the phrase “fuel flow can only be initiated when the overspeed indication is removed” would be understood by one of ordinary skill in the art to be a reference to various operating conditions that must be satisfied prior to fuel flow being initiated.

With respect to the assertion that there is no basis in the original specification for the material added to the specification, Applicant respectfully disagrees and submits that the application as filed, does in fact support the above-referenced specification amendments. More specifically, with respect to the changes made to the paragraph beginning on page 2, at line 12, and ending at page 2, at line 21, the application as originally filed does in fact support such

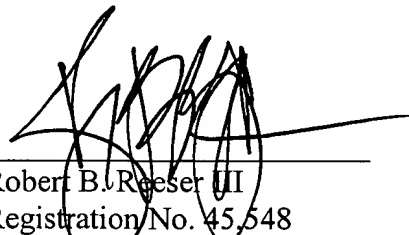
limitations. For example, the priority logic table illustrated in Figure 3 illustrates a plurality of conditions under which engine fuel flow may be initiated based on the various combinations of signals shown in Figure 3. An artisan of ordinary skill in the art, after reading the specification in light of the Figures, would recognize that within the priority logic table, various operating combinations are shown, many of which include a signal indicative of an overspeed condition, which must be removed before fuel flow may be initiated.

Furthermore, with respect to the changes made to the paragraphs beginning on page 6, at line 3, and ending at page 6, at line 13, the application as originally filed also supports such limitations. For example, Figure 2 illustrates at least one fuel metering device 50 coupled within a fuel system interface 36 to receive electrically-originated overspeed signals, and Figure 4 illustrates **the same** fuel metering device 50 coupled within **the same** fuel system interface 36 to receive mechanically-originated overspeed signals. Accordingly, the amendments to the specification are respectfully submitted to have been supported by the specification as originally filed.

Accordingly, for at least the reasons set forth above, Applicant requests the Section 112, first paragraph, rejections of Claims 1-3, 5-9, 11-16, and 18 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited

Respectfully Submitted,



Robert B. Reeser III
Registration No. 45,548
ARMSTRONG TEASDALE LLP
One Metropolitan Square, Suite 2600
St. Louis, Missouri 63102-2740
(314) 621-5070